Open Coast: Data and Tools to Enhance Coastal Management

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50 YEARS OF COASTAL PROTECTION

California Coastal Commission

Our Mission

Protect & Enhance California's Coast

The Commission is committed to protecting and enhancing California's coast and ocean for present and future generations. It does so through careful planning and regulation of environmentally-sustainable development, rigorous use of science, strong public participation, education, and effective intergovernmental coordination.

Coastal Commission and GIS

- Planning and regulatory authority along the Coast
- Partnerships with local governments and agencies
- GIS supports science, planning and transparency
- Spatial data informs coastal decision - making

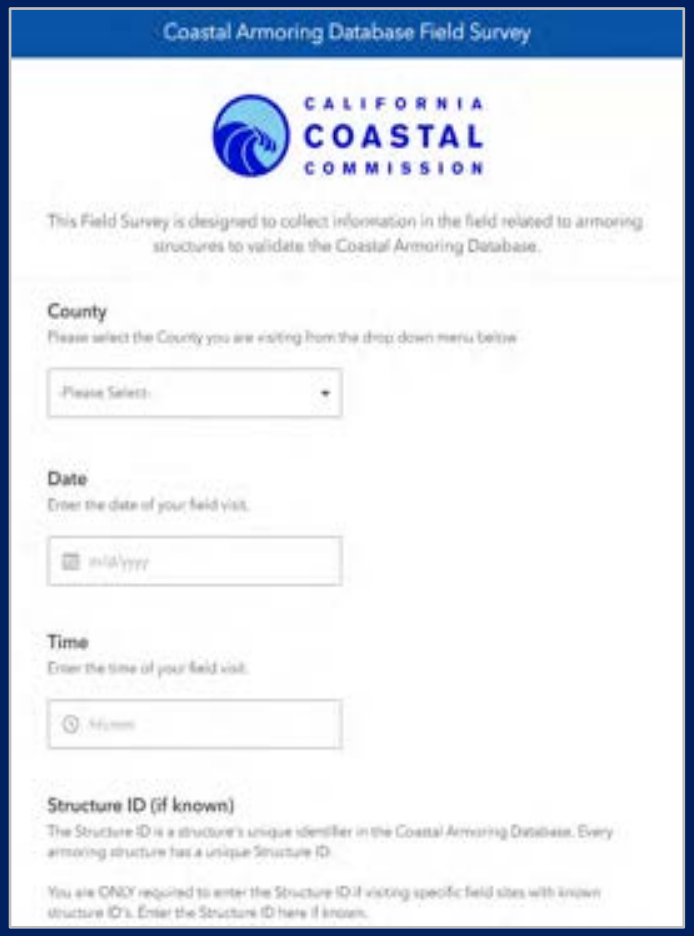
The Open Coast vision

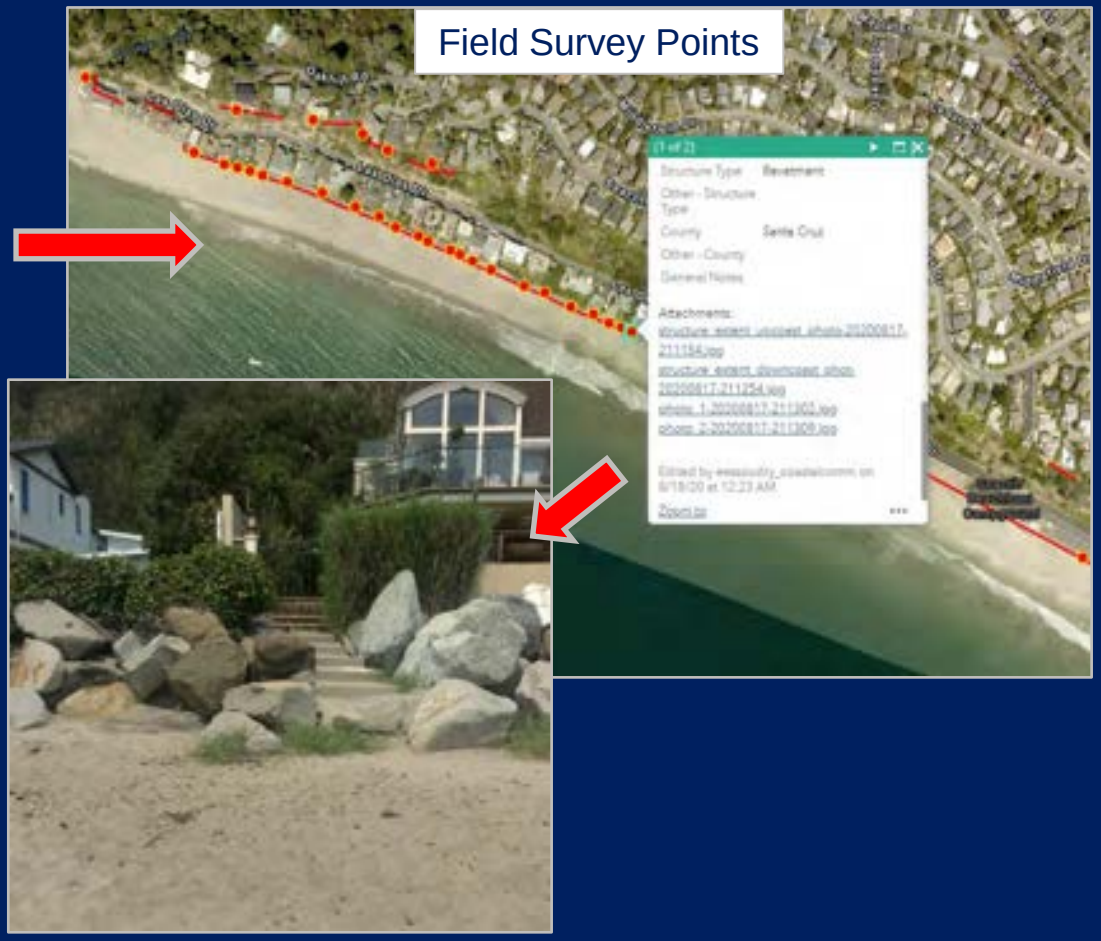
- The Coast is for all to enjoy
- Managing competing priorities
- Climate change is accelerating challenges
- Data is critical to informed decision-making

Mapping Coastal Armoring

- 4,300+ structures mapped statewide
- Includes seawalls, revetments, bulkheads
- Links spatial data with permit history, site visit and Coastal Records photos
- Built from imagery + field validation

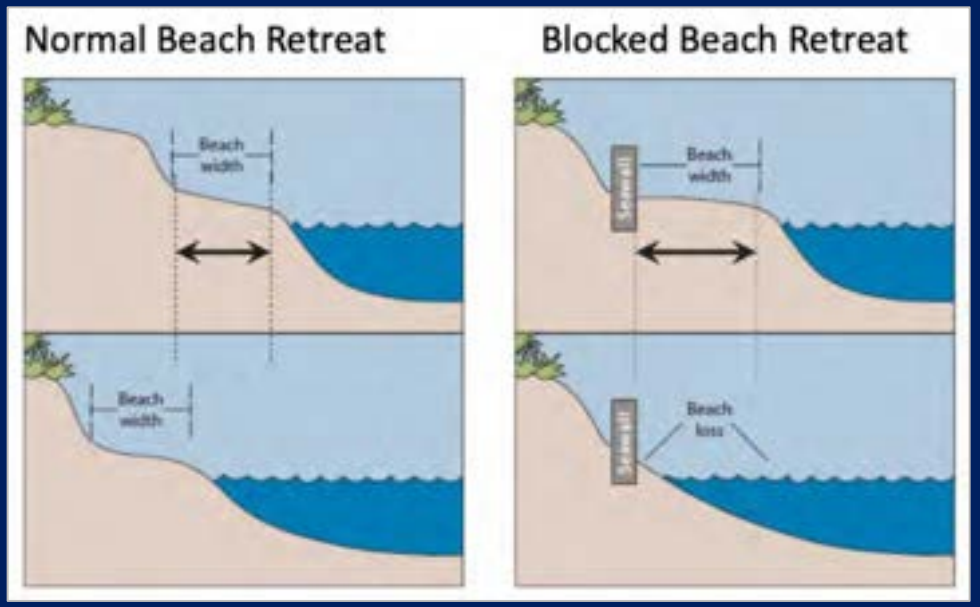
Coastal Armoring Database





WHY MAP ARMORING?

- Impacts beach width and access
- Influences coastal erosion patterns
- Critical for sea level rise planning
- Supports policy and permitting decisions

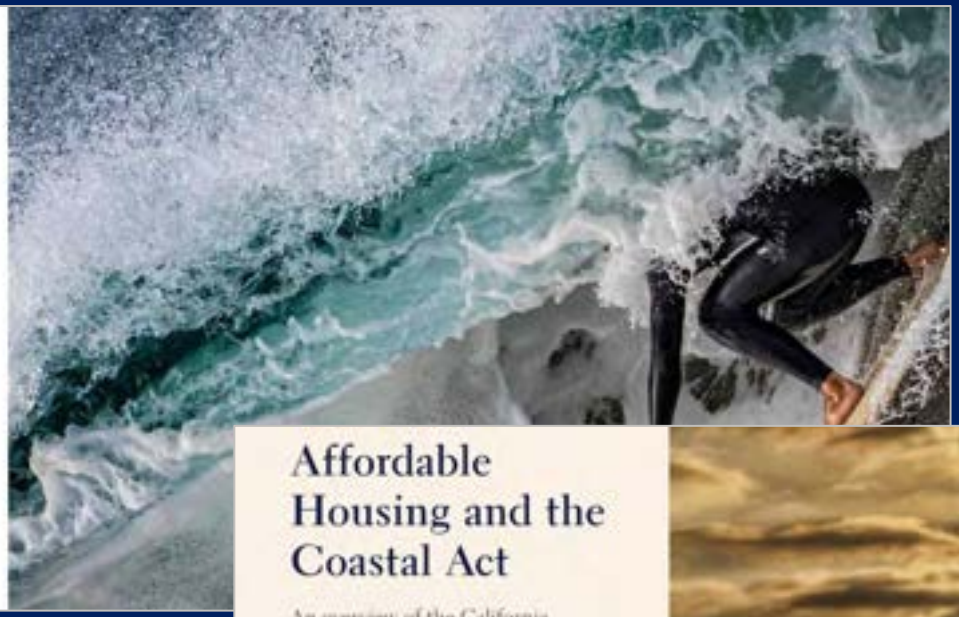


Environmental Justice

A Coast For All

Environmental justice groups have a long history of marginalization and frustration with government agencies in their struggle for basic rights like clean water, clean air and safe schools. All too often, government inaction or worse, adverse action on these issues has led to a mistrust of public agencies and officials, contributing to a vicious cycle of exclusion.

By **adopting and implementing an environmental justice policy**, the California Coastal Commission is demonstrating its commitment to diversity and protecting coastal natural resources for the benefit of all Californians regardless of race, ethnicity, gender, socio-economic status, or place of residence.



Affordable Housing and the Coastal Act

An overview of the California Coastal Commission's historic authority and current actions to provide affordable housing.

- EJ Story Map
- Affordable Housing and the Coastal Act

Mapping Environmental Justice

CCC Environmental Justice Tool

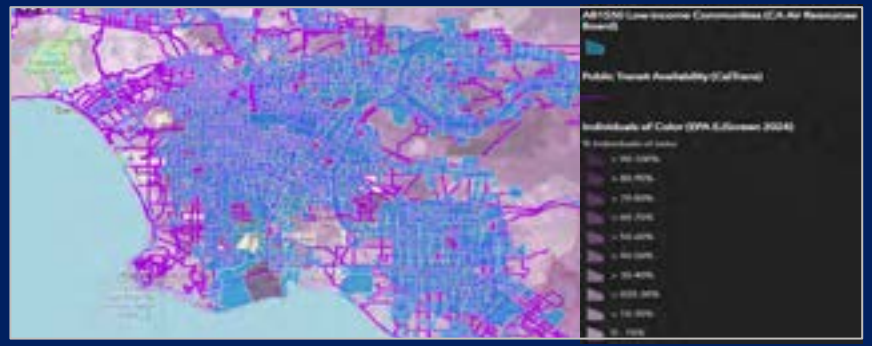
Identifies underserved communities
Highlights areas with higher social vulnerability and limited access to coastal resources.

Combines demographics, access, and hazards
Integrates population data, coastal access points, and environmental hazards.

Supports equitable planning decisions
Provides data-driven insights to advance equity in coastal programs and policies.

Prioritizes access investments
Helps target resources where coastal access needs are greatest.

Data helps us identify where access is needed most and advance equity for all.



Mapping Coastal Access

CCC Coastal Access Data

Maps public access points, trails, and amenities
Comprehensive inventory of coastal access infrastructure and facilities.

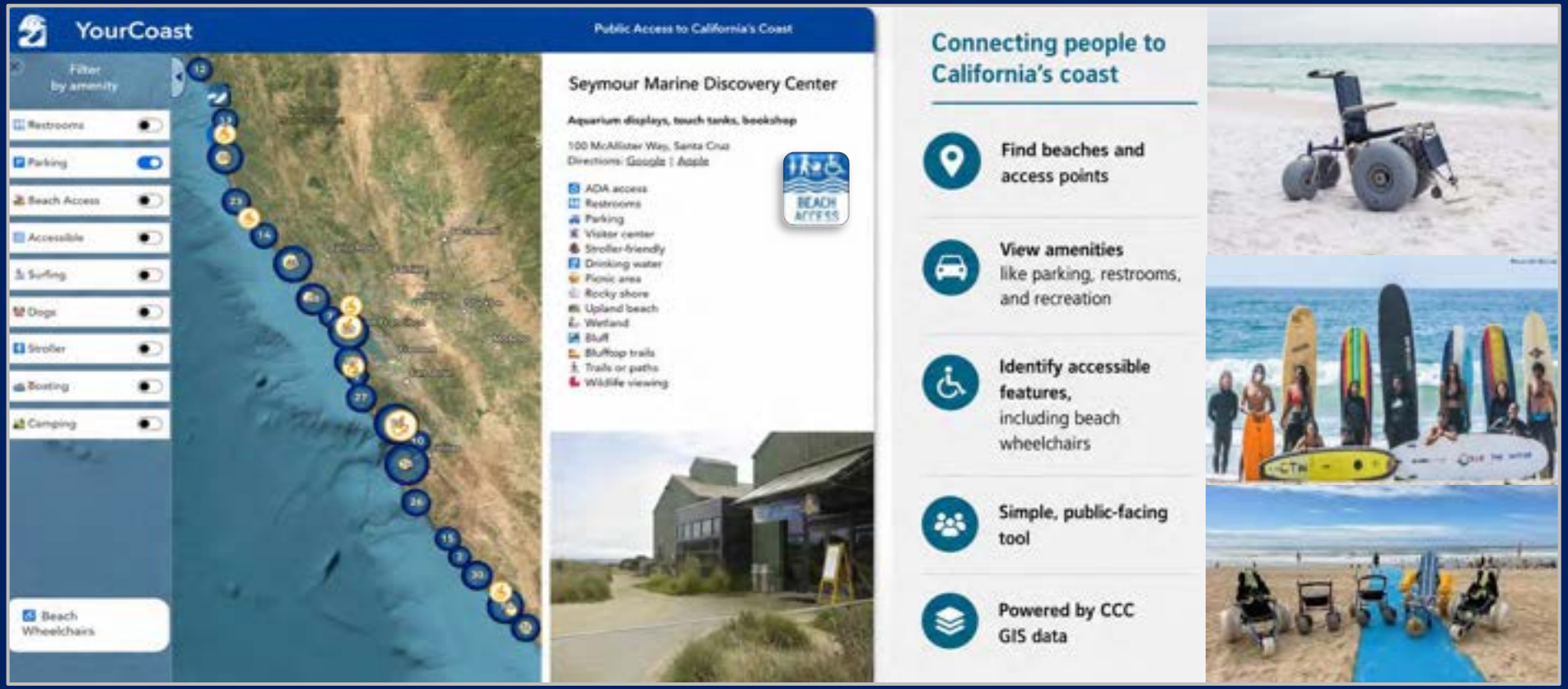
Supports planning and coastal access protection
Informs permitting, land use planning, and coastal access policies.

Helps identify gaps in access
Pinpoints areas with limited or no public access to the coast.

Connects people to the coast
Strengthens public use and enjoyment of California's coastline.

Beach Access for Everyone

CCC Your Coast App



CCC Open Data

CCC Open Data

Public access to coastal data

- Public access to Coastal Commission GIS data
- Browse and download datasets
- Access live maps and services
- Supports planners, researchers, and partners
- Promotes transparency in coastal decision-making

Making coastal data more accessible and transparent.

Takeaways and Next Steps

- Data improves coastal decisions
- Open data and tools expand access
- GIS connects people to place
- An open coast is an informed coast
- Coastal Commission Jurisdiction GIS Data coming soon!

THANK YOU

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